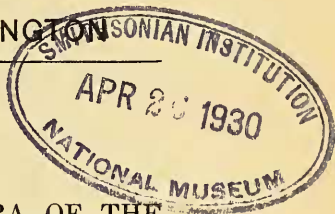


PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



SEVENTH SUPPLEMENT TO THE FLORA OF THE
DISTRICT OF COLUMBIA AND VICINITY.

BY W. L. McATEE.

This supplement contains not only a list of additions¹ to knowledge of the Flora of the District of Columbia and Vicinity since the last summary in Volume 21 of Contributions from the United States National Herbarium, but also the results of a recheck of all records in what may be termed the regular series of publications on our flora beginning with that of Ward in 1881 and extending to that of Hitchcock and Standley (and 20 collaborators) in 1919. This series comprises the following:

Ward, Lester F., Guide to The Flora of Washington and Vicinity, Bul. 22, U. S. National Museum, 1881, 264 pp., 1 map.

Ward, Lester F. List of plants added to the flora of Washington from April 1, 1882, to April 1, 1884. Proc. Biol. Soc. Washington 2: 84-87. 1884.

Knowlton, Frank H. Additions to the flora of Washington and vicinity from April 1, 1884, to April 1, 1886. Op. cit. 3: 106-132. 1886.

Holm, Theodor. Third list of additions to the flora of Washington, D. C. Op. cit. 7: 105-132. 1892.

Holm, Theodor. Fourth list of additions to the flora of Washington, D. C. Op. cit. 10: 29-43. 1896.

Holm, Theodor. Fifth list of additions to the flora of Washington, D. C. Op. cit. 14: 7-22. 1901.

Steele, Edward S. Sixth list of additions to the flora of Washington, D. C., and vicinity. With Descriptions of New Species and Varieties by Edward L. Greene, Alvah A. Eaton, and the author. Op. cit. 14: 47-86. 1901.

¹Literature reviewed through 1928, local records through 1929.

Hitchcock, A. S. and Paul C. Standley (with the Assistance of the Botanists of Washington). *Flora of the District of Columbia and Vicinity*, Contr. U. S. National Herbarium, 21: 1919. 329 pp., 42 pls.

In the following pages the publications cited are referred to as 1881 Flora, Suppl. 1, Suppl. 2, etc., and 1919 Flora. In each case the number at the left refers to the pertinent page in the 1919 Flora.

The present, or seventh supplement, consists of five sections, namely:

I. Species, hybrids, and varieties hitherto unrecorded in the regular series of publications on the District of Columbia Flora.

II. Species and varieties previously recorded in the regular series of publications on District of Columbia plants, but not accounted for in the 1919 Flora.

III. Additional records for species, hybrids and varieties cited from only a single locality in the 1919 Flora.

IV. Miscellaneous additions and corrections to the 1919 Flora.

V. Records of certain transplanting operations.

Contribution of notes and other assistance in the preparation of this supplement is gratefully acknowledged from the following persons in particular, as well as from others mentioned in connection with individual notes: Mr. J. E. Benedict, Jr., Dr. S. F. Blake, Dr. A. K. Fisher, Mr. O. M. Freeman, Mr. Alvah Godding, Dr. Robert F. Griggs, Dr. Theo. Holm, Mr. E. P. Killip, Dr. Wm. A. Maxon, and Dr. Edgar T. Wherry. The help of Drs. Blake and Wherry in going over two drafts of the manuscript has been especially appreciated.

I.

Species, hybrids, and varieties, hitherto unrecorded in the regular series of publications on the District of Columbia Flora. This section totals 91 species, 53 varieties, and 1 hybrid.

52. *Botrychium obliquum* var. *elongatum* Gilbert and Haberer.

Recorded from D. C. by Robinson and Fernald (Gray's Man., 7th Ed., 1908, p. 49).

55. *Adiantum capillus-veneris* L.
Escaped at Woodside, Md. (Benedict, Amer. Fern Journ. 14, 1924, p. 21); station since destroyed, J. E. Benedict, Jr.
56. *Polystichum acrostichoides* var. *schweinitzii* (Beck) Small.
Fairly common, E. T. Wherry.
56. *Athyrium angustum* (Willd.) Presl.
Escaped from cultivation, Chevy Chase, D. C., 1925, Edgar T. Wherry.
57. *Filix fragilis* (L.) Underwood.
Two varieties occur, one with short erect rootstocks which grows on rocks and another with long horizontal rootstocks found in alluvial soil. The former is var. *mackayi* Lawson and the latter has not as yet received a name.
61. *Picea abies* (L.) Karst.
The Norway Spruce has escaped locally, Alvah Godding.
66. *Elodea occidentalis* Pursh.
Recorded from Washington, D. C., June 11, 1882, L. F. Ward, in Harold St. John's revision of this group according to which *E. canadensis* Michx. (*Anacharis canadensis* of the Flora) seems not to occur in our region.
72. *Andropogon scoparius* var. *villosissimus* Kearney.
Deanwood, D. C. (F. Tracy Hubbard, Rhodora, 19, p. 102, June, 1917); Hitchcock does not give this form nomenclatorial recognition.
80. *Echinochloa crusgalli* var. *mitis* Pursh.
Echinochloa crusgalli var. *edulis* Hitchc.
Recorded from D. C. by Hitchcock (Contr. U. S. Nat. Herb. 22, Pt. 3, 1920, pp. 145, 147, respectively).
80. *Chaetochloa ambigua* (Guss.) Scribn. and Merr.
Recorded from D. C. by Hitchcock (Contr. U. S. Nat. Herb., 22, Pt. 3, 1920, p. 186).
82. *Aristida curtissii* (A. Gray) Nash.
Near Chillum, Md., Sept. 24, 1926, S. F. Blake.
84. *Agrostis schweinitzii* Trin.
Low shady woods near Clinton, Md., Theo. Holm (det. C. V. Piper); regarded by Hitchcock as a synonym of *A. perennans* (Walt.) Tuckerm.
84. *Sphenopholis obtusata* var. *pubescens* (Scribn. and Merr.) Scribn.
Riverdale, Md., June 26, 1920, S. F. Blake.
90. *Bromus hordeaceus* var. *leptostachys* (Pers.) Beck.
Recorded from D. C. by Robinson and Fernald (Gray's Man.,

7th Ed., 1908, p. 163); regarded by Hitchcock as a synonym of *B. racemosus* L.

90. *Lolium multiflorum* Lam.

Old field near Clinton, Md., Theo. Holm.

91. *Elymus*.

In a revision of "The Missouri Species of *Elymus*" (Amer. Midl. Nat., 10, Nos. 2-3, March-May, 1926, pp. 49-88) B. F. Bush cites specimens from our region and makes changes affecting the names of our species. *E. striatus* var. *arkansanus* (Scribn. and Ball) Hitchc. of the Flora is raised to specific rank. *E. glaucifolius* Muhl. takes the place of *E. canadensis* L. of the Flora and is recorded from Maryland and the District of Columbia; its variety *E. g.* var. *crecendus* Ramaley is recorded from the D. C.; *E. virginicus* var. *intermedius* Vasey replaces *E. virginicus hirsutiglumis* (Scribn.) Hitchc. of the Flora, and *E. virginicus* var. *glabrifolius* Vasey is recorded from the District of Columbia. The D. C. list is amended from 4 species and 2 varieties to 5 species and 3 varieties.

92. *Phyllostachys mitis* Riv.

This small bamboo is escaped locally, for instance along Chain Bridge Road near Cherrydale, Va., and also near Fort C. F. Smith, Va., W. L. McAtee; identified by Agnes Chase.

96. *Eleocharis engelmanni* var. *detonsa* Gray.

Bradley Hills, Md., July 6, 1924, S. F. Blake.

101. *Carex caryophyllea* Lat.

Recorded from D. C. by Britton and Brown (Illus. Flora, 2nd Ed., 1, 1913, p. 391); and by Robinson and Fernald (Gray's Man., 7th Ed., 1908, p. 237).

108. *Carex plana* Mackenzie.

Camp Humphreys, Va., June 2, 1929, S. F. Blake. Determined by K. K. Mackenzie.

109. *Carex mirabilis* Dewey.

Chain Bridge Flats, June 1, 1919, F. W. Hunnewell.

109. *Carex tribuloides* var. *sangamonensis* Clokey.

Chillum, Md., June 21, 1926, S. F. Blake; determined by K. K. Mackenzie.

111. *Carex plantaginea* Lam.

Fairfax County, Va., April 14, 1918, F. W. Hunnewell.

114. *Wolffiella floridana* (J. D. Smith) C. H. Thomps.

Shaw's Lily Ponds, Kenilworth, D. C., Aug. 4, 5, 1929, S. F. Blake.

115. *Eriocaulon parkeri* Robinson.

Mouth of Cameron Run, near New Alexandria, Va., Aug. 13, 1910 (F. W. Pennell, Torreya, 2, No. 6, June, 1911, p. 13). This is the

basis of the Washington, D. C., record by Britton and Brown (Illus. Flora, 2nd Ed., I, 1913, p. 454), copied by E. J. Grimes (Rhodora, 24, p. 149, Aug., 1922). The identification originally by J. K. Small is confirmed by Bayard Long who has recently examined the material at the Academy of Natural Sciences in Philadelphia. Previously *Eriocaulon parkeri* has been recorded only from scattered stations in eastern estuaries. It has been collected in our region also from the shore of Accotink Bay, Camp Humphrey, Va., Oct. 12, 1924, and also at the original locality, Oct. 20, 1929, by S. F. Blake.

118. *Juncus tenuis* var. *anthelatus* Wiegand.

Near Cheverly, Md., July 9, 1926, S. F. Blake; determined by K. M. Wiegand.

119. *Juncus debilis* Gray.

Low wet ground in woods near Clinton, Md., Theo. Holm (determined by F. V. Coville and S. F. Blake).

120. *Tulipa sylvestris* L.

Brookville Road, 1 mile southwest of Forest Glen, Md., April, 1929, G. W. Morey.

122. *Yucca filamentosa* L.

Established on interurban right of way, Orchard View Station, Md., where the Baltimore Boulevard crosses the tracks. F. M. Uhler, W. L. McAtee.

124. *Polygonatum hebetifolium* (Gates) Bush.

Originally described as a variety of *P. biflorum* (Walt) Ell., in part from local material (Gates, R. R., Bul. Torrey Bot. Club, 44, No. 3, March, 1917, p. 122), is recorded from Chevy Chase, D. C., and Sligo, Md., by B. F. Bush (Amer. Midland Nat., 10, Nos. 11-12, Sept.-Nov., 1927, p. 392).

124. *Polygonatum commutatum* var. *virginicum* (Greene) Gates.

Dalecarlia Reservoir, D. C.; May 23, 1905, Joseph H. Painter (Gates, loc. cit. p. 124). "Mr. Hunnewell * * * showed a *Polygonatum* from Washington, D. C., and Virginia, which * * * has been described as *P. commutatum* (R. & S.) Dietr. var. *virginicum* (Greene) Gates" (Notice No. 14, New Engl. Bot. Club., p. [3], Sept., 1925). This would place as a variety of *P. giganteum* of the Flora.

125. *Smilax glauca* var. *leurophylla* Blake.

Local material is used as part of the basis for this variety which differs from the typical and more southern variety by having the leaves neither pulverulent nor papillose beneath. (Blake, S. F., Rhodora, 20, p. 80, April, 1918.)

126. *Iris virginica* L.

This species considered separable from *I. versicolor* L. by Edgar Anderson is recorded by him from Alexander Id., D. C., May 15, 1915, Van Eseltine (Ann. Mo. Bot. Gard. 15, No. 3, Sept., 1928, p. 256).

130. *Isotria affinis* (Aust.) Rydb.
North of Chevy Chase, J. Frank Schairer; English Corners, Bethesda, Md., June 5, 1929, O. M. Freeman.
131. *Corallorrhiza odontorhiza* forma *flavida* Wherry.
This form was described (Journ. Wash. Acad. Sci., 17, 1927, p. 36) from a plant collected in 1924, by Mrs. Nellie C. Knappen in a ravine west of Pierce Mill.
135. *Populus balsamifera* L.
Recorded from banks of Potomac opposite Plummers Id., Md. (Sargent, C. S., Journ. Arn. Arb. 1, No. 1, July, 1919, p. 63).
135. *Myrica cerifera* L.
Paint Branch Bog No. 2, Md. I inspected this plant for several years before obtaining mature fruit that enabled positive identification. W. L. McAtee.
136. *Carya glabra* var. *hirsuta* Ashe.
"This tree is not uncommon on rocky wooded slopes along the Potomac River at Great Falls, Virginia." (W. W. Ashe, Bul. Torrey Bot. Club., 46, p. 225, June, 1919).
136. *Carya glabra* var. *megacarpa* Sargent.
District of Columbia (C. S. Sargent, Bot. Gaz. 66, p. 244, Sept., 1918).
136. *Carya ovalis* Wang. var. *odorata* Sargent.
District of Columbia (C. S. Sargent, op. cit. p. 246).
145. *Polygonum aequale* Lindman.
Vacant lots in Anacostia, D. C., and on old roads near Clinton, Md., Theo. Holm. A segregate from *P. aviculare* L. (Lindman, C. A. M., Svensk Bot. Tidschr. 6, 1912, pp. 673-696, Pls. 23-26).
154. *Dianthus barbatus* L.
Collected along roadside, Suitland, Md., May 26, 1918, in flower; the rootstock, 18 inches in length, showed the plant had been established some years; several plants were seen. W. L. McAtee.
155. *Nymphaea americana* (Prov.) Miller and Standley.
Accotink, Va., Edgar T. Wherry.
155. *Nelumbo lutea* (Willd.) Pers.
Accotink Bay, August, 1923, J. E. Benedict, Jr., and Edgar T. Wherry.
156. *Coptis trifolia* (L.) Salisb.
Ammendale, Md., Brother Arsene.
158. *Ranunculus delphinifolius* Torr.
In a pool between Widewater on the canal and the river, Robert Humphrey.

158. **Ranunculus parviflorus** L.
Weed in experimental chestnut orchard, Bell, Md., June 9, 1928.
W. L. McAtee.
161. **Magnolia tripetala** L.
Well established in upper Rock Creek Park at several places;
appears native but possibly escaped from old time plantings; bloomed
well, 1926, Elmer Walter.
162. **Platystemon californicus** Benth.
Potomac Park, D. C., along railroad, April 15, 1921, O. M. Free-
man.
165. **Alyssum alyssoides** L.
Lanham, Md., June, 1909 (C. F. Wheeler's notes).
167. **Sophia pinnata** (Walt.) Howell.
Baltimore and Ohio belt railroad near District Line, Md.; Great
Falls, Va., Mrs. O. M. Freeman.
170. **Reseda lutea** L.
Abundant in old fields in the vicinity of Arundel, Md., Wild Flower
Preservation Society, July 4, 1928.
171. **Philadelphus coronarius** L.
Escaped in woods near Potomac, Md., August 13, 1920, O. M.
Freeman.
171. **Heuchera pubescens** Pursh.
Rich woods above Great Falls, Va., June, 1917, Titus Ulke (det.
E. P. Killip).
172. **Saxifraga pennsylvanica** L.
Pinehurst, 1920, C. E. Waters.
172. **Hydrangea arborescens** var. **oblonga** T. and G.
Recorded from the District of Columbia by Harold St. John (Rho-
dora, 23, p. 207, Sept., 1921).
174. **Spiraea alba** Du Roi.
Dunn-Loring, Va., Aug., 1922; two miles northwest of Beane, Md.,
Aug., 1927, O. M. Freeman.
174. **Rosa carolina** var. **glandulosa** Crepin.
Takoma Park, D. C. (Alfred Rehder, Journ. Arn. Arb., 3, No. 1,
July, 1921, p. 16).
175. **Rubus occidentalis** forma **pallidus** (Bailey) Robinson.
Beltsville, Md., Cherrydale, Va., W. L. McAtee.
175. **Rubus alleghaniensis** Porter.
Recorded from our region by Wm. H. Blanchard (Torreya, 7,
No. 3, March, 1907, p. 56).

175. *Rubus frondosus* Bigelow.

About Washington as far as Fairfax, Va. (Blanchard, Bul. Torr. Bot. Club, 38, No. 9, Sept., 1911, p. 434-435). Blanchard described (*Torreya*, loc. cit.) in part from local material, *R. philadelphicus*, a form which he was later inclined to think should be recognized as a variety of *R. frondosus*.

175. *Rubus andrewsianus* Blanchard.

Recorded from our region in both of the foregoing references by Blanchard (*Torreya*, p. 56, Bul. Torr. Club, p. 438).

175. *Rubus phoenicolasius* Maxim.

Large colonies are established in several localities, one of which is near Lock No. 13, C. and O. Canal, Md., and another along roadside near Lyttonsville, Md., W. L. McAtee.

176. *Geum canadense* var. *grimesii* Fernald and Weatherby.

This variety was described in part from local material, Washington, D. C., June 18, 1896, E. S. Steele (M. L. Fernald and C. A. Weatherby, *Rhodora*, 24, p. 49, March, 1922).

176. *Drymocallis agrimonioides* Pursh (*Potentilla arguta* Pursh).

Recorded from D. C. by Robinson and Fernald (*Gray's Man.*, 7th Ed., 1908, p. 481); also by Small (Galley proof, new Manual Flora S. E. States).

177. *Malus platycarpa* Rehd. var. *hoopesii* Rehd.

Ballston, Va., April 23, 1929, S. F. Blake. Determined by A. Rehder.

178. *Amelanchier laevis* Wiegand.

Apparently should be given formal status in the list. Specimens of this species from here have been identified by its author, and W. W. Ashe implies its presence here by the expression "not common" (*Bul. Torrey Bot. Club*, 46, p. 221, June, 1919). F. W. Hunnewell identified it from Montgomery Co., Md., April 20, 1919. Alfred Rehder records also an *A. canadensis* \times *laevis* hybrid from Alexandria, Va. (*Journ. Arn. Arb.*, 2, No. 1, p. 46, July, 1920).

178. *Amelanchier canadensis* var. *intermedia* Spach.

Apparently the common form in Magnolia bogs (W. L. McAtee, *Bul. 1, Biol. Soc. Wash.*, 1918, p. 79; W. W. Ashe, op. cit. pp. 221-222; K. M. Wiegand, *Rhodora*, 22, p. 148, September, 1920).

178. *Amelanchier sanguinea* Pursh.

"On shaded rocks along the Potomac River, at Great Falls, Virginia" (Ashe, op. cit., p. 222).

178. *Amelanchier sera* Ashe.

Described from material collected "on rocky banks along the Potomac River, Fairfax County, Virginia, and Montgomery County, Maryland" (Ashe, op. cit., pp. 222-223).

178. *Amelanchier micropetala* var. *potomacensis* Ashe.
Described from "rocky banks along the Potomac River, Fairfax County, Virginia" (Ashe, op. cit., pp. 223-224).
179. *Crataegus apposita* Sargent.
Great Falls, Va. (W. W. Ashe, Bul. Torrey Bot. Club, 46, p. 225, June, 1919).
179. *Crataegus smithii* Sargent.
Great Falls, Va. (Ashe, loc. cit.).
185. *Coronilla varia* L.
Compost heap, Arlington Farm, Va., June 16, 1928, W. L. McAtee.
186. *Meibomia sessilifolia* Torr.
St. Elmo, Va., August 18, 1921, O. M. Freeman.
188. *Lespedeza stuvei* var. *neglecta* Britton.
Oak Station near Dyke, Va., Oct. 21, 1924, S. F. Blake.
190. *Strophostyles helvola* var. *missouriensis* (S. Wats.) Britt.
Swamps, New Alexandria, Va., 1924, Edgar T. Wherry. This form is given specific rank by Britton and Brown (Illus. Flora, 2nd Ed II, 1913, p. 423). Recorded from D. C. by Robinson and Fernald (Gray's Man. 7th Ed., 1908, p. 529).
190. *Tropaeolum majus* L.
The common nasturtium was collected in flower in the bottom of a ditch, far from any house, at Dyke, Va., July 4, 1910, W. L. McAtee.
192. *Geranium bicknellii* Britton.
Arlington Farm, Va., May 12, 1903 (C. F. Wheeler's notes).
192. *Xanthoxalis corniculata* var. *langloisii* Small.
Banks of Potomac, District of Columbia, F. Peck (K. M. Wiegand, Rhodora, 27, p. 121, July, 1925).
195. *Croton monanthogynus* Michx.
A waif near Chevy Chase, D. C., 1925, Edgar T. Wherry.
195. *Croton capitatus* Michx.
Linden, Md., Oct. 14, 1928, J. E. Benedict, Jr.
195. *Acalypha digyneia* Raf.
Bethesda, Md., Sept. 10, 1899, E. S. Steele (C. A. Weatherby, Rhodora, 29, p. 199, Oct., 1927).
197. *Tithymalus peplus* (L.) Hill.
Scott's Id., Md., Oct., 1922, E. A. Preble.
200. *Acer rubrum* var. *tridens* Wood.
Hyattsville, Md., July 12, 1926, Paul C. Standley and S. F. Blake.

201. *Impatiens balsamina* L.

Spontaneous in my yard, formerly woodland, for years; Maywood, Va., W. L. McAtee.

202. *Tilia michauxii* Nutt.

"Along the Potomac River from above Great Falls to below Marshall Hall, Va." (W. W. Ashe, Bul. Torrey Bot. Club, 46, p. 225, June, 1919.)

202. *Tilia neglecta* Spach.

"Growing with the preceding but in greater abundance." (Ashe, op. cit., p. 226.) Valley of Potomac River (C. S. Sargent, Bot. Gaz. 66, p. 495, Dec., 1918).

202. *Althaea rosea* Cav.

Rough land near seawall, West Potomac Park, July 15, 1928, W. L. McAtee.

203. *Napaea dioica* L.

Below Great Falls, Va., Aug. 21, 1917, W. L. McAtee.

205. *Hypericum virgatum* Lam.

One mile southeast of Laurel, 1922, Edgar T. Wherry.

205. *Elatine minima* Nutt.

Alexandria, Va., A. H. Curtiss (M. L. Fernald, Rhodora, 19, p. 15, Jan., 1917).

207. *Viola chinensis* L. (*V. lancifolia* Pollard.)

Recorded as spontaneous in botanical gardens, D. C., by Britton and Brown (Illus. Flora, 2nd Ed., 2, 1913, p. 558).

208. *Viola incognita* Brainerd.

Kensington, Md., 1926, R. G. Cogswell.

210. *Viola hirsutula* x *papilionacea*.

This hybrid is recorded from the District of Columbia region by Ezra Brainerd (Bul. 224, Vt. Agr. Exp. Sta., p. 169, Dec., 1921).

211. *Opuntia pollardi* Britton and Rose.

The plants near Bowie and elsewhere east of Washington appear to represent this species, Edgar T. Wherry.

211. *Opuntia calcicola* Wherry.

Banks of Potomac, south of Poolesville, Md., and possibly nearer Washington, Edgar T. Wherry (Journ. Wash. Acad. Sci., 16, 1926, p. 13).

211. *Elaeagnus multiflora* Thunb.

Edge of canal near Cabin John, Md., 1928, A. K. Fisher.

211. *Elaeagnus umbellata* Thunb.

Forest Glen, Md., April 28, 1929, J. E. Benedict, Jr.

217. *Bupleurum rotundifolium* L.

At present a waif near Chevy Chase, D. C., Edgar T. Wherry.

218. *Osmorrhiza longistylis* var. *brachycoma* Blake.

Described in part from District of Columbia material, the type from Cabin John, Md. (S. F. Blake, *Rhodora*, 25, pp. 110-111, July, 1923).

218. *Osmorrhiza longistylis* var. *villicaulis* Fernald.

Common in our region (Blake, loc. cit.). The key on p. 217 requires revision as a result of these studies.

218. *Chaerophyllum procumbens* var. *shortii* Torr. and Gr.

Recorded by Coulter and Rose. (*Contr. U. S. Nat. Herb.*, 7, No. 1, p. 59, Dec. 1900).

218. *Oenanthe phellandrum* Lam.

Collected June 10, 1897, near Washington Monument, by E. S. Steele (Coulter and Rose, *Contr. U. S. Nat. Herb.* 7, no. 1, Dec., 1900, p. 254).

218. *Oxypolis rigidior* var. *ambigua* (Nutt.) Robinson.

Recorded under the name *longifolia* Britton from various Magnolia Bogs. (McAtee, *Bul. 1, Biol. Soc. Wash.*, 1918, pp. 80, 83.)

218. *Pimpinella saxifraga* L.

English Corners, Bethesda, Md., July 21, 1929, O. M. Freeman.

222. *Hypopitys insignita* Bicknell.

Occurs at several places east and northeast of Washington, among them, Riverdale, Ardwick, and Suitland, Edgar T. Wherry. This is probably the peculiar form referred to by Holm (*Suppl. 4*, p. 36).

223. *Azalea arborescens* Pursh.

Great Falls, Va. (W. W. Ashe, *Bul. Torrey Bot. Club*, 47, p. 582, Dec., 1920); Difficult Run, Va., 1924, Edgar T. Wherry. According to Rehder our local form is var. *richardsonii*.

223. *Azalea atlantica* Ashe.

Takoma Park, May 11, 1900, T. A. Williams (Alfred Rehder, *Publ. 9, Arn. Arb.*, p. 148, 1921).

223. *Azalea viscosa* variety.

Rhododendron viscosa forma *rhodantha* Rehder was described in part from local material Hyattsville, Md., May 31, 1915, E. S. Steele; Washington, D. C., June 15, 1909, W. W. Cooke (Rehder, op. cit. p. 160).

223. *Azalea viscosa* variety.

Rhododendron viscosa var., *tomentosa* (Dumont de Courset), Hyattsville, Md., June 27, F. H. Knowlton; June 4, 1904, H. D. House; Barcroft, Va., June 6, 1915, E. S. Steele (Rehder, op. cit., p. 163).

223. *Azalea rosea* Lois.

Difficult Run, Va., May 16, 1920, E. P. Killip, determined by Rehder. [Rehder treats all of the azaleas under the genus *Rhododendron*.]

225. *Vaccinium vacillans* var. *crinitum* Fernald.

Lanham, Bladensburg, and Hyattsville, Md., S. F. Blake.

225. *Vaccinium pennsylvanicum* Lam.

A small colony on wooded hillside, Arundel, Md., Wild Flower Preservation Society, July 4, 1928.

226. *Anagallis arvensis* var. *caerulea* (Schreb.) Ledeb.

Abundant at Arundel, Md., Edgar T. Wherry.

228. *Fraxinus caroliniana* Mill.

"Along the Potomac River opposite Washington" (W. W. Ashe, *Bul. Torrey Bot. Club*, 46, p. 226, June, 1919).

229. *Gentiana clausa* Raf.

Much of the Washington material included in *G. andrewsii* Griseb. in the 1919 Flora corresponds to this as redefined by Fernald (*Rhodora*, 19, 1917, p. 147).

230. *Trachelospermum difforme* (Walt.) Gray.

Meadow by river, Washington, June 5, 1918, F. W. Hunnewell.

234. *Convolvulus japonicus* Thunb.

Recorded from D. C. by Britton and Brown (*Illus. Flora*, 2nd Ed., III, 1913, p. 46).

235. *Phlox subulata*.

Local plants are densely glandular on new growth and have the flowers chiefly white, corresponding in these respects with *P. brittonii* Small, which probably should be ranked as a variety of *P. subulata*, Edgar T. Wherry.

237. *Lappula lappula* L.

Railroad yard opposite Bureau of Printing and Engraving, Washington, D. C., Grace G. Street.

242. *Agastache scrophulariaefolia* (Willd.) Ktze.

Boulder Bridge, Rock Creek Park, 1922, Edgar T. Wherry

244. *Monarda media* Willd.

Glenmont, Md. (north of Wheaton), 1926, Edgar T. Wherry.

250. *Chelone glabra* var. *ochroleuca* Pennell and Wherry.

Patuxent River (Wherry, Edgar T., *Bartonia*, 10, 12, Jan., 1929, p. 2).

250. *Chelone obliqua* L.

Patuxent Swamp, near Marlboro, Md., 1924, J. E. Benedict, Jr., 1925, Edgar T. Wherry. This plant had been lost to science for 175 years until thus rediscovered. (See *Bartonia*, 10, 12, Jan., 1929, p. 2).

251. *Ilysanthes dubia* var. *inundata* Pennell.

Recorded from along the Potomac River near Alexandria, Va., in connection with the original description. (Pennell, F. W., *Torreyia*, 19, p. 149, Aug., 1919).

252. *Veronica anagallis-aquatica* L.

Muddy shore of Potomac, July 13, 1918, F. W. Hunnewell.

255. *Seticapsella cleistogama* (A. Gray) Barnhart.

Suitland, Md., Edgar T. Wherry.

255. *Stomosisia juncea* (Vahl.) Barnhart.

Suitland bog, Aug. 13, 1921, O. M. Freeman.

258. *Galium mollugo* L.

Ammendale, Md., Sept. 8, 1916, Brother F. Hyacinth; large clump by roadside, "King St. extended," near Alexandria line, Arlington Co., Va., May 14, 1929, S. F. Blake.

258. *Galium pilosum* var. *puncticulosum* (Michx.) Torr. and Gray.

Near Hyattsville, Md., July 29, 1920, S. F. Blake.

258. *Galium verum* L.

Discovered at Arundel, Md., years ago by M. B. Waite; still to be found there; also one mile south of Laurel, 1922, Edgar T. Wherry.

264. *Picris echioides* L.

Chevy Chase, D. C., Sept. 23, 1928, P. L. Ricker.

265. *Prenanthes altissima* L.

Near Bethesda, Md., 1925, W. L. McAtee.

267. *Crepis japonica* (L.) Benth.

Well established on the estate of Dr. E. A. Merritt, one mile northwest of Chevy Chase Lake, Md., May 29, 1929, O. M. Freeman.

267. *Xanthium*.

A new treatment of the genus for the region, based on the revision of Millspaugh and Sherff, was published by McAtee and Metcalf in 1920 (*Proc. Biol. Soc. Wash.* 33, pp. 177-179, Pl. 4). A key based on characters of the burs is given as well as illustrations of the latter. The revised list is:

267. *Xanthium spinosum* L.

Rare waif in various localities, not collected since 1896.

267. *Xanthium chinense* Mill.
Abundant in waste ground, cultivated fields and dumps. (*X. americanum* of the Flora.)
267. *Xanthium pennsylvanicum* Wallr.
Same status as last. (*X. commune* of the Flora in part.)
267. *Xanthium italicum* Moretti.
Frequent in waste ground. (*X. commune* of the Flora in part.)
267. *Xanthium speciosum* Kearney.
A single, but robust plant along Water St., near 33d.
274. *Eupatorium album* var. *subvenosum* Gray.
Recorded from Terra Cotta Swamp and other localities (McAtee, Bul. 1, Biol. Soc. Wash., 1918, p. 83).
275. *Eupatorium urticaefolium* var. *villicaule* Fernald.
Between Little Falls and Chain Bridge, Va., Sept. 21, 1920, S. F. Blake.
278. *Solidago juncea* var. *scabrella* (Torr. and Gray) Gray.
Clarendon, Va., 1928, S. F. Blake.
281. *Aster lateriflorus* var. *pendulus* (Ait.) Burgess.
Lanham, Md., 1912, W. R. Maxon (Wiegand, K. M., *Rhodora*, 30, p. 174, Sept., 1928).
281. *Aster vimineus* var. *dubius* Wiegand.
Described in part from local material, Hyattsville, Md., 1914, E. S. Steele (Wiegand, K. M., *Rhodora*, 30, p. 171, Sept., 1928).
281. *Aster dumosus* var. *coridifolius* (Michx.) Torr. and Gray.
Takoma Park, D. C., 1897, T. A. Williams; Riverdale, Md., 1916, E. S. Steele (Wiegand, K. M., *Rhodora*, 30, p. 166, Sept. 1928).
282. *Aster paniculatus* var. *simplex* Willd.
Mineshoe Id., Md., Edgar T. Wherry.
282. *Aster ericoides* var. *platyphyllus* Torr. and Gray.
Conduit Road, Md., about opposite Lock No. 14, Oct. 30, 1927 (Blake, S. F., *Rhodora*, 30, p. 106, May, 1928).
282. *Erigeron pusillus* Nutt.
Landover, Md., Aug. 26, 1923, S. F. Blake.
284. *Gnaphalium obtusifolium* var. *helleri* (Britton) Blake.
Near Cabin John, Md., Oct. 26, 1923, S. F. Blake.
285. *Parthenium hysterophorus* L.
Twelfth St., near Ohio Ave., Washington, D. C., July 5, Aug. 2, 1929, W. A. Dayton and S. F. Blake.

289. *Bidens aristosa* var. *fritcheyi* Fernald.
Great Falls, Va., Cabin John, Md., E. S. Steele; near Plummery Id., Md., Philip Dowell; West Potomac Park, S. F. Blake (S. F. Blake).
289. *Bidens aristosa* var. *mutica* A. Gray.
Glen Echo, Md., Sept. 17, 1920, S. F. Blake.
289. *Bidens frondosa* var. *anomala* Porter.
Georgetown, D. C. (Sherff, E. E., Bot. Gaz. 4, p. 34, July, 1917); various localities in our region (Blake, S. F., Rhodora, 27, pp. 34-35, Feb., 1925).
290. *Helenium tenuifolium* Nutt.
Abundant by roadside, Fort Humphreys near Accotink, Va., Oct. 12, 1924, S. F. Blake.
290. *Matricaria chamomilla* L.
One plant in old vegetable garden, and a good-sized colony behind an unoccupied house, Clarendon, Va., 1928, S. F. Blake.
292. *Cirsium arvense* var. *integrifolium* Wimm. and Grab.
Near Cabin John, Md., June 26, 1926, S. F. Blake.

II.

Species and varieties previously recorded in the regular series of publications on District of Columbia plants, but not accounted for in the 1919 Flora. Some of these may represent misidentifications and if any one has information to that effect it should be placed on record. This section totals 50 species and 36 varieties.

54. *Pteridium latiusculum* var. *pseudocaudatum* Clute.
Kenilworth and Hyattsville, E. S. Steele (Suppl. 6, p. 48).
59. *Lycopodium annotinum* L.
Holmead Swamp, E. Foreman (Suppl. 2, p. 110); Henson's Creek, G. W. Oliver (Suppl. 3, p. 131). Out of range, probably a misidentification.
59. *Lycopodium alopecuroides* L.
Sphagnum Swamp, Henson's Creek, G. W. Oliver (Suppl. 3, p. 131); later (1919) found by W. R. Maxon and P. C. Standley in Suitland Bog (Amer. Fern Journ. 10, 1920, p. 1); College Park, Md., 1924, E. T. Wherry; clay pit near Arlington Farm, Va., 1924, S. F. Blake.
60. *Isoetes saccharata* var. *reticulata* A. A. Eaton.
Hunting Creek, Geo. Vasey, Frederick Coville, W. R. Maxon; Anacostia River, E. S. Steele. Described wholly from local material (Suppl. 6, p. 49); on the same page Eaton describes also var. *palmeri*, and notes that specimens collected at Mount Vernon by Coville are intermediate between it and the typical form.

60. *Isoetes riparia* Engelm.

Hunting Creek, F. V. Coville (Suppl. 3, p. 132). Restricted by Gray's Manual to a plant found on tidal shores of the Delaware River. The local record may be correct nevertheless; compare the similar range of *Eriocaulon parkeri*.

77. *Panicum angustifolium* Ell.

The records of *P. ramulosum* Michx., Takoma, F. L. Scribner and T. H. Kearney, Jr. (Suppl. 4, p. 42); Terra Cotta, Theo. Holm (Suppl. 5, p. 21) may belong here; if so it is an additional species for the list.

80. *Chaetochloa geniculata* var. *perennis* Hall.

Various localities, E. S. Steele (Suppl. 6, p. 51). A variety not mentioned in the 1919 Flora but stated by Hitchcock in his later revision of the North American species (Contr. U. S. Nat. Herb., 22, Pt. 3, 1920, p. 172) to be unworthy along with other variants of the species, of nomenclatorial recognition.

80. *Cenchrus*.

According to Mrs. Chase's 1920 revision (Contr. U. S. Nat. Herb., 22, Pt. 1, pp. 69-74) *C. tribuloides* L. and *C. pauciflorus* Benth. both occur in our region. The records cited are: Mount Vernon, Tidestrom, for the former, and Deanwood, D. C., for the latter; *pauciflorus* occurs also at Black Pond, Va., Edgar T. Wherry, 1923.

82. *Aristida gracilis* var. *depauperata* Gray.

Bennings, E. S. Steele (Suppl. 6, p. 51).

83. *Agrostis canina* L.

Vacant lots near B. & O. Depot (i. e. First and C Sts. N. W.), F. L. Scribner (Suppl. 2, p. 109).

85. *Danthonia sericea* Nutt.

West of Tenleytown, G. B. Sudworth (Suppl. 3, p. 130); near Highland, Theo. Holm (Suppl. 5, p. 20).

86. *Tridens flavus* variety.

Tricuspis sesleroides var. *pallida* Holm. described from Marshall Hall (Suppl. 5, p. 19) is said to be the typical form, and the name therefore is a straight synonym.

90. *Bromus maximus* Desf.

Dumping ground, D. C., E. S. Steele (Suppl. 6, p. 53).

91. *Elymus striatus* var. *villosus* Gray.

1881 Flora (p. 134); evidently not considered worthy of recognition.

93. *Cyperus rivularis* Kunth.

Typical form and the variety *eluta* Clarke are equally common, Theo. Holm (Suppl. 5, p. 17).

94. *Cyperus fuscus* var. *viridescens* Hoffm.
Foot of Duke St., Alexandria, E. S. Steele (Suppl. 6, p. 53).
94. *Cyperus cylindricus* (Ell.) Britton.
Kenilworth Swamp; Bennings, E. S. Steele (Suppl. 6, p. 54).
94. *Cyperus strigosus* var. *robustior* Kunth.
Recorded by E. S. Steele (Suppl. 6, p. 53).
94. *Cyperus strigosus* var. *compositus* Britton.
Recorded by E. S. Steele (Suppl. 6, p. 53).
96. *Eleocharis intermedia* (Muhl.) Schultes.
Opposite Eighth Lock, Md., G. H. Hicks (Suppl. 4, p. 39); near Takoma; Marshall Hall, Theo. Holm (Suppl. 5, p. 18).
96. *Eleocharis obtusa* var. *jejuna* Fernald.
Kenilworth, E. S. Steele (Suppl. 6, p. 54).
98. *Fuirena squarrosa* Michx.
Holmead Swamp (1881 Flora, p. 125); Lydecker Basin, Theo. Holm (Suppl. 5, p. 17); the 1919 Flora does not state whether these are considered misidentifications; the plant's range covers our region.
99. *Rynchospora fusca* L.
Doubtfully recorded in the Flora. Theo. Holm reports it from near Fort Myer (Suppl. 5, p. 18).
100. *Scleria reticularis* var. *pubescens* Britton.
Paint Branch Bogs; north of Kenilworth, E. S. Steele (Suppl. 5, p. 55). S. F. Blake also collected this form in the Powder Mill Bogs, Aug. 27, 1928.
110. *Carex communis* var. *wheeleri* Bailey.
Potomac Shore, Va., Theo. Holm (Suppl. 4, p. 41).
114. *Lemna gibba* L.
Old Canal, foot of Eighteenth and Twentieth Sts., Lester F. Ward (Suppl. 3, p. 125). Out of range, probably a misidentification.
119. *Juncus brevicaudatus* (Engelm.) Fernald.
Bennings, E. S. Steele (Suppl. 6, p. 58).
127. *Sisyrinchium angustifolium* Mill.
Conduit Road, E. S. Steele (Suppl. 6, p. 59).
133. *Salix alba* var. *vitellina* (L.) Koch.
1881 Flora (p. 116).
140. *Quercus lyrata* Walt.
Bottoms 3 miles below Laurel, Md., Robert Ridgway (Garden and Forest, 3, p. 129, March, 1890); near High Island, Geo. B. Sudworth (Suppl. 3, p. 24).

141. *Celtis occidentalis* var. *pumila* Muhl.
Various localities, E. S. Steele (Suppl. 6, p. 60).
141. *Morus alba* var. *tatarica* (L.) Loud.
Near old observatory; Canal Road, E. S. Steele (Suppl. 6, p. 60).
144. *Rumex brittanicus* L.
Rosslyn, Va., G. H. Hicks (Suppl. 4, p. 38); also recorded in 1881 Flora (p. 108).
147. *Polygonum dumetorum* L.
Recorded by Ward (1881 Flora, p. 108). Whether in the 1919 Flora it was intended to synonymize this name with *scandens* L. is not made clear. The two are treated as distinct by current manuals.
149. *Acnida tamariscina* (Nutt.) Wood.
Potomac Flats, E. S. Steele (Suppl. 6, p. 61).
153. *Alsine stricta* Michx.
Great Falls, G. H. Hicks (Suppl. 5, p. 10).
155. *Castalia tuberosa* Paine.
Little Hunting Creek, W. Hunter (Suppl. 3, p. 107). Probably a misidentification.
159. *Thalictrum coriaceum* (Britt.) Small.
Common, E. S. Steele (Suppl. 6, p. 63). This record of a mountain form probably is a misidentification.
169. *Cardamine parviflora* var. *arenicola* Britton.
Potomac Flats, E. S. Steele (Suppl. 6, p. 64).
174. *Spiraea salicifolia* L.
The records under this name belong under *S. latifolia* of the 1919 Flora; *S. salicifolia* is now known to be an Asiatic species.
175. *Rubus villosus* var. *humifusus* Torr. and Gray.
Various localities, E. S. Steele (Suppl. 6, p. 64).
175. *Rubus trivialis* Michx.
Bennings, Hyattsville, E. S. Steele (Suppl. 6, p. 64).
176. *Potentilla reptans* L.
Brightwood, E. L. Greene (Suppl. 5, p. 11).
177. *Agrimonia pubescens* var. *bicknellii* Kearney.
Linnaean Hill Road, E. S. Steele (Suppl. 6, p. 65).
179. *Crataegus rotundifolia* (Ehrh.) Borck.
Riverdale, Tenleytown, E. S. Steele (Suppl. 6, p. 66).
179. *Crataegus flava* Ait.
South Arlington, E. S. Steele (Suppl. 6, p. 66).

180. *Prunus instititia* L.
Roadside above Bennings (1881 Flora, p. 77).
- 180 *Prunus armeniaca* L.
Found in several places growing without cultivation (1881 Flora, p. 76).
186. *Meibomia glabella* Michx.
Hillside above First Lock; Woodley Park, E. S. Steele (Suppl. 6, p. 66).
187. *Meibomia lineata* Michx.
Suitland, E. S. Steele (Suppl. 6, p. 66).
195. *Chamaesyce hirsuta* (Torr.) Arthur.
Great Falls and Marshall Hall, Md., Theo. Holm (Suppl. 5, p. 16).
199. *Ilex glabra* Gray.
Swamp beyond Silver Hill, G. W. Oliver (Suppl. 3, p. 110); between Camp Spring and Surrattsville, G. W. Oliver, W. T. Swingle, M. B. Waite (Suppl. 4, p. 33); again collected in this region (near Clinton) in 1928 by Theo. Holm.
200. *Acer saccharum* var. *nigrum* (Michx.) Britt.
Island above Feeder Dam, F. V. Coville (Suppl. 3, p. 111).
200. *Acer pseudo-platanus* L.
Recorded as spontaneous along New-cut Road by E. S. Steele (Suppl. 6, p. 69).
213. *Epilobium coloratum* var. *umbrosum* Haussk.
Bethesda, E. S. Steele (Suppl. 6, p. 72).
230. *Apocynum androsaemifolium* L.
Besides the single locality given in the Flora for this species, not formally admitted to the list, are William Hunter's record for Woodlawn, Va. (Suppl. 2, p. 108); L. F. Ward and Theo. Holm's for Corcoran Woods (Suppl. 3, p. 118); and Theo. Holm's for South Brookland (Suppl. 4, p. 36).
234. *Convolvulus sepium* var. *americanum* Sims.
Rosslyn, Va., Theo. Holm (Suppl. 3, p. 120); Bunker Hill Road, Theo. Holm (Suppl. 5, p. 14).
246. *Lycopus europaeus* L.
Virginia shore above Aqueduct Bridge, E. S. Steele (Suppl. 6, p. 77).
246. *Mentha rotundifolia* L.
Weed in Agricultural Grounds, E. S. Steele (Suppl. 6, p. 77).
247. *Physalis philadelphica* Lam.
Woodley Park, Geo. B. Sudworth (Suppl. 3, p. 121); opposite mouth

of Cabin John's Run, G. F. Hicks (Holm. Suppl. 4, p. 37). This may be *subglabrata* MacKenzie and Bush.

252. *Veronica agrestis* L.
Accotink, Wm. Hunter (Suppl. 3, p. 121); Catholic University, Theo. Holm (Suppl. 5, p. 15).
265. *Sonchus arvensis* L.
Brookland, Theo. Holm (Suppl. 5, p. 14).
267. *Hieracium marianum* Willd.
Opposite south end of Anolostan Island, E. S. Burgess (Suppl. 3, p. 117); Virginia above Aqueduct Bridge, E. S. Steele (Suppl. 6, p. 80).
274. *Eupatorium purpureum* var. *amoenum* Pursh.
Rock Creek, F. H. Knowlton (Suppl. 2, p. 107).
274. *Eupatorium perfoliatum* var. *truncatum* Gray.
Woodley Park, E. S. Burgess (Suppl. 3, p. 114).
275. *Eupatorium semiserratum* DC.
Great Falls, Theo. Holm (Suppl. 4, p. 35).
275. *Eupatorium aromaticum* var. *melissoides* Gray.
Woodley Park, E. S. Burgess (Suppl. 3, p. 114).
275. *Laciniaria graminifolia* var. *dubia* Gray.
(1881 Flora, p. 56); recorded under the name *pilosa* Britton from various Magnolia Bogs (McAtee, W. L., Bul. 1, Biol. Soc. Wash., 1918, p. 83).
278. *Solidago altissima* var. *procera* Ait.
Spout Run, E. S. Burgess (Suppl. 3, p. 114); Bethesda, E. S. Steele (Suppl. 6, p. 83).
278. *Solidago juncea* var. *ramosa* Porter and Britton.
Glen Echo Railroad, E. S. Steele (Suppl. 6, p. 83).
280. *Aster azureus* Lindl.
Terra Cotta, E. S. Burgess (Suppl. 3, p. 115).
281. *Aster lucidulus* (A. Gray) Wiegand.
Terra Cotta, H. W. Henshaw (Suppl. 3, p. 115); abundant along Potomac River; a good species near *A. puniceus*; runs to *A. laevis* in the local key, Edgar T. Wherry.
281. *Aster puniceus* var. *firmus* Nees.
Brick Haven; foot of First St., E. S. Steele (Suppl. 6, p. 84).
281. *Aster laevis* var. *cyaneus* Gray.
1881 Flora (p. 88).
281. *Aster novi-belgii* var. *elodes* T. and G.
Common, E. S. Steele (Suppl. 6, p. 84).

281. *Aster salicifolius* Ait.
Various localities (1881 Flora, p. 88; E. S. Steele, Suppl. 6, p. 84).
282. *Aster paniculatus* var. *acutidens* Burgess.
Potomac Flats, E. S. Steele (Suppl. 6, p. 84).
282. *Aster ericoides* var. *villosus* Torr. and Gray.
Woodley Park, Lester F. Ward (Suppl. 1, p. 85); Lobelia Run, Lester F. Ward (Suppl. 2, p. 107).
282. *Doellingeria umbellatus* var. *latifolius* Gray.
Recorded (as var. *humilis* Willd.) at Terra Cotta, Bennings, etc., E. S. Steele (Suppl. 6, p. 84).
285. *Polymnia canadensis* var. *radiata* Gray.
Glen Echo, E. S. Steele (Suppl. 6, p. 85).
285. *Heliopsis scabra* Dunal.
Spout Run, E. S. Burgess (Suppl. 3, p. 116).
287. *Helianthus microcephalus* T. and G.
Cowden, Va., E. S. Steele (Suppl. 6, p. 85).
287. *Helianthus hirsutus* Raf.
E. S. Steele (Suppl. 6, p. 85).
290. *Tanacetum vulgare* var. *crispum* L.
Brightwood, Great Falls, E. S. Steele (Suppl. 6, p. 86).
292. *Cirsium pumilum* (Nutt.) Spreng.
Woodley Park, Geo. B. Sudworth (Suppl. 3, p. 117).

III.

Additional records for species, hybrids, and varieties cited from only a single locality in the 1919 Flora. This section totals 65 species, 1 hybrid, and 2 varieties.

56. *Polypodium polypodioides* (L.) Hitch.
Black Pond, Va., 1926, H. S. Barber.
58. *Dryopteris clintoniana* (D. C. Eaton) Dowell.
Broad Branch Valley, Rock Creek Park, 1924, Edgar T. Wherry;
Paint Branch, Md., 1925, J. E. Benedict, Jr.
58. *Dryopteris goldiana* x *marginalis* Dowell.
Rock Creek Bridge, D. C., 1925, Miss J. J. Brainerd.
77. *Panicum wernerii* Scribn.
Rock Creek Park, D. C., June 23, 1918, S. F. Blake.
78. *Panicum spretum* Schult.
Hyattsville; Terra Cotta, Theo. Holm (Suppl. 5, p. 21).

79. *Panicum addisoni* Nash.
Suitland, E. S. Steele (Hitchcock and Chase, Contr. U. S. Nat. Herb., 15, 1910, p. 244).
82. *Muhlenbergia schreberi* var. *palustris* Scribn.
Beaver Dam Branch, E. S. Steele (Suppl. 6, p. 52); Terra Cotta Swamp, Theo. Holm.
84. *Sphenopholis obtusata* (Michx.) Scribn.
North Brookland, Theo. Holm (Suppl. 4, p. 41); Reform School, Theo. Holm (Suppl. 5, p. 19); Clarendon and Ballston, Va., Great Falls, Md., 1928, S. F. Blake.
88. *Panicularia obtusa* (Muhl.) Kuntze.
Surattsville, Theo. Holm (Suppl. 5, p. 20).
91. *Hordeum pusillum* Nutt.
South Washington, E. S. Steele (Suppl. 6, p. 53).
94. *Cyperus torreyi* Britton.
Swamp near Riverdale, and low woods near Clinton, Md., Theo. Holm.
94. *Cyperus retrofractus* (L.) Torr.
Along the Canal Road, Theo. Holm (Suppl. 3, p. 128); South Brookland, Theo. Holm (Suppl. 4, p. 39).
95. *Kyllinga pumila* Michx.
Listed in the Flora only from the now extinct Holmead Swamp; occurs in various Magnolia Bogs, W. L. McAtee; Marshall Hall, Theo. Holm (Suppl. 5, p. 17).
96. *Eleocharis olivacea* Torr.
Holmead Swamp being obliterated, E. S. Steele's record of this plant at one mile north of Berwyn can be cited as additional to the only other mentioned in the Flora (Suppl. 6, p. 54); has been collected also at Clinton, Md., Theo. Holm.
99. *Rynchospora axillaris* (Lam.) Britt.
Swamps around Surattsville (Clinton) and Silver Hill, Theo. Holm (Suppl. 4, p. 39); various localities, Theo. Holm (Suppl. 5, p. 18); occurred also in Holmead Swamp (Suppl. 3, p. 128).
100. *Scleria pauciflora* Muhl.
Flora states "frequent above the fall line." Lakeland and one or two other localities given by E. S. Steele (Suppl. 6, p. 55) are below the fall line.
100. *Scleria pauciflora* var. *caroliniana* (Willd.) Wood.
Near Hyattsville, and Cheverly, Md., S. F. Blake.
108. *Carex conjuncta* Boott.
High Island, Theo. Holm (Suppl. 4, p. 40).

112. *Carex typhina* Michx.
Hyattsville, Theo. Holm (Suppl. 5, p. 19); near Clinton, Md., Theo. Holm.
113. *Carex bullata* Schkuhr.
Beaver Dam Branch, Reform School (1881 Flora, p. 130); Brightwood, E. S. Steele (Suppl. 6, p. 55).
122. *Muscari botryoides* (L.) Mill.
Sandy Landing, Theo. Holm (Suppl. 5, p. 17).
129. *Habenaria cristata* (Michx.) R. Br.
College Park, 1924, Wild Flower Preservation Society.
130. *Ibidium plantagineum* (Raf.) House.
Black Pond, Va., 1922, Mrs. Nellie C. Knappen.
135. *Comptonia peregrina* (L.) Coulter.
A large colony grows on a hill along Bullneck Run, Va., E. A. Preble; another is near mouth of Scott's Run, Va., O. M. Freeman; and the plant is abundant near Odenton, Md., W. L. McAtee.
149. *Iresine rhizomatosa* Standley.
Mineshoe Island, 1922, Clarence R. Shoemaker.
155. *Cabomba caroliniana* A. Gray.
Abundant in Susquehanna Run, Prince George's County, Md., Sept. 29, 1923, S. F. Blake and W. W. Diehl.
157. *Anemone canadensis* L.
Hunting Creek Valley west of Alexandria, Va., 1926, Mrs. Flagg.
166. *Radicula hispida* (Desv.) Britton.
Chain Bridge Flats, Geo. B. Sudworth (Suppl. 3, p. 108); Marshall Hall, Theo. Holm (Suppl. 5, p. 9); Jackson City, E. S. Steele (Suppl. 6, p. 64).
175. *Rubus odoratus* L.
Vicinity of National Observatory, Geo. B. Sudworth (Suppl. 3, p. 111).
176. *Geum hirsutum* Muhl.
Ammendale, 1924, Edgar T. Wherry; Soldiers' Home, July 24, 1928, S. F. Blake.
177. *Malus coronaria* (L.) Mill.
South Brookland, Robert Ridgway (Suppl. 4, p. 34); and Eckington, E. S. Steele (Suppl. 6, p. 65).
178. *Aronia melanocarpa* (Michx.) Britton.
Flora states "region of Four-mile Run; perhaps elsewhere." This seems to be the most generally distributed of our choke-berries, W. L. McAtee.
179. *Crataegus monogyna* Jacq.
Corcoran Woods, Theo. Holm (Suppl. 3, p. 112).

184. *Lotus corniculatus* L.

Compost heap, Arlington Farm, Va., June 16, 1928, W. L. McAtee.

188. *Vicia hirsuta* (L.) S. F. Gray.

Kendall Green, Chickering (1881 Flora, p. 76); Potomac Flats; Anacostia, E. S. Steele (Suppl. 6, p. 67).

189. *Lathyrus myrtifolius* Muhl.

Marshes of the Potomac below Washington, as at New Alexandria and Accotink, Edgar T. Wherry.

191. *Geranium dissectum* L.

Waste land, Washington, D. C., June 6, 1913, S. F. Blake.

195. *Crotonopsis linearis* Michx.

Abundant by roadside near Bailey's Crossroads, Fairfax Co., Va., Oct. 15, 1929, S. F. Blake.

197. *Poinsettia dentata* (Michx.) Small.

The Flora gives two localities which are so near together as to be virtually one; a remote one is railroad embankment at Brookland, D. C., Theo. Holm; the plant occurs also on Scott's Island, Edgar T. Wherry.

199. *Schmaltzia crenata* (Mill.) Greene.

Only one station is given in the Flora; additional is a clump just below Great Falls, Va., 1922, Edgar T. Wherry; worth mentioning, though beyond local flora range, is the abundance of this plant where the highway crosses Goose Creek, Va., near its mouth, Aug. 9, 1924, W. L. McAtee.

202. *Ampelopsis arborea* (L.) Rusby.

Fort Washington, Md., 1927, Edgar T. Wherry.

212. *Lythrum salicaria* L.

West Potomac Park, in rough land near sea wall, July 15, 1928, W. L. McAtee.

213. *Ludwigia hirtella* Raf.

Only the extirpated Holmead Swamp is cited in the Flora, which states "not collected recently." It has been rediscovered, however, east of Laurel, 1924, Edgar T. Wherry.

214. *Trapa natans* L.

The Flora records this only from the now destroyed Fish Ponds and states "now extinct." It was common, however, below Marshall Hall, Md., June 28, 1927, C. C. Sperry; and has been collected near Susquehanna Run, Md., Sept. 29, 1923, S. F. Blake and W. W. Diehl; at Fox Ferry, D. C., and was abundant in bay at mouth of Oxon Run, Md., Sept. 16, 1924, S. F. Blake, Earl V. Shannon, Edgar T. Wherry; also at Gunston Cove, H. S. Barber, and south end of Highway Bridge, Va., June 19, 1929, O. M. Freeman.

215. *Scandix pecten-veneris* L.

Seabrook, Md., Walter H. Evans (Suppl. 5, p. 11); Potomac Park, D. C., along railroad, April 15, 1921, O. M. Freeman.

217. *Eryngium aquaticum* L.

Abundant in the field between the Conduit Road and Stubblefield Fall, Robert F. Griggs.

218. *Heracleum lanatum* Michx.

Recorded from High Island in the Flora which reads "probably extinct now." It still occurs at several places along the canal, Edgar T. Wherry; and F. W. Hunnewell collected it on Potomac Flats, June, 1919.

220. *Cornus alternifolia* L.

Virginia opposite Plummers Id., May 9, 1926, S. F. Blake; Soapstone Quarry, Va., opposite Glen Echo, W. L. McAtee.

220. *Cornus femina* Mill.

Occoquan, Va., Nov. 18, 1929, Neil Hotchkiss.

221. *Pyrola elliptica* Nutt.

Garrett Park, Theo. Holm (Suppl. 4, p. 36).

223. *Rhododendron maximum* L.

There is a large colony on south bank of Bull Run just above Occoquan Village, W. L. McAtee.

228. *Spigelia marylandica* L.

Seven Locks, Md., June 22, 1924, A. K. Fisher.

229. *Sabbatia campanulata* (L.) Torr.

Bog at Virginia Highlands, 1920, site destroyed, C. R. Shoemaker; besides the Falls Church station mentioned in the 1919 Flora, which has also been destroyed, there is another along the electric railroad west of West Falls Church, Edgar T. Wherry, 1927.

237. *Heliotropium europaeum* L.

Near Aqueduct Bridge, M. S. Bebb (Suppl. 1, p. 86).

238. *Myosotis scorpioides* L.

Well established in brooks near Burnt Mills, 1927, Edgar T. Wherry.

244. *Monarda fistulosa* L.

Not uncommon in this region, especially in the Piedmont; Chevy Chase, 1923, Edgar T. Wherry; Cherrydale, Va., Conduit Road, Md., near Glen Echo, O. M. Freeman.

252. *Veronica chamaedrys* L.

Near Soldiers' Home, Theo. Holm (Suppl. 5, p. 15).

254. *Pedicularis lanceolata* Michx.

Fox Ferry Road, Md., May 17, 1928, W. L. McAtee.

264. *Apargia autumnalis* (L.) Hoffm.
Brookland, Theo. Holm (Suppl. 5, p. 13).
264. *Hypochaeris radicata* L.
Clump in lawn, Clarendon, Va., 1928, S. F. Blake; also Bethesda, Md., Oct. 5, 1929, O. M. Freeman.
275. *Eupatorium serotinum* Michx.
One clump in wall of the tidal basin, Potomac Park, Washington, Nov. 1, 1927, S. F. Blake.
275. *Grindelia squarrosa* (Pursh.) Dunal.
Arlington Farm, Va., 1922, Lillian Cash; July 12, 1929, O. M. Freeman.
289. *Bidens connata* Muhl.
Accotink, W. Hunter (Suppl. 3, p. 116); Eckington and Brookland, Theo. Holm (Suppl. 5, p. 13); Arlington and Bennings, E. S. Steele (Suppl. 6, p. 85).
289. *Galinsoga caracasana* (DC) Schultz Bip.
Between Chain Bridge and Lock No. 1; also Plummers Id., Md., S. F. Blake.
290. *Anthemis tinctoria* L.
Bradley Lane, Chevy Chase, Md., Edgar T. Wherry.
290. *Artemisia vulgaris* L.
Hyattsville, Theo. Holm (Suppl. 5, p. 13).
291. *Mesadenia reniformis* (Muhl.) Raf.
The Flora gives Ward's locality (High Id.) only and states "probably now extinct." Knowlton later recorded it from Alexander Island, J. A. Allen (Suppl. 2, p. 130).
291. *Senecio vulgaris* L.
Uniontown, Lester F. Ward (Suppl. 1, p. 85); Potomac Flats, G. H. Hicks (Suppl. 4, p. 35).
291. *Senecio obovatus* Muhl.
Burnt Mills, Md., 1928, J. E. Benedict, Jr.; near Cabin John, Md., 1918, 1920, S. F. Blake.
292. *Cirsium muticum* Michx.
West Falls Church, near the interurban station, 1922, Edgar T. Wherry.
293. *Centaurea vochinensis* Bernh.
Good-sized colony in a vacant lot, Clarendon, Va., Aug. 13, 1928, S. F. Blake.

IV.

Miscellaneous additions and corrections to the 1919 Flora.

53. *Lygodium palmatum* (Bernh.) Swartz.

The colony east of Riverdale is dwindling rapidly; this seems to be due not to vandalism but to neutralization of the acidity of the soil by lime and fertilizers washed down from adjoining cultivated fields. Edgar T. Wherry.

55. *Camptosorus rhizophyllus* (L.) Link.

Stations within the District of Columbia itself are south wall of Oak Hill Cemetery, 1923, Emily W. Dinwiddie, and a boulder above Beach Drive, Upper Rock Creek Park, 1925, Mrs. Nellie C. Knappen.

55. *Asplenium ebenoides* R. R. Scott.

A hybrid between *Camptosorus rhizophyllus* and *Asplenium platyneuron* which should not have a name of its own apparently indicating specific rank, nor be given a formal place in the list.

56. *Polypodium vulgare* L.

Most recent authors agree in treating the form in the Eastern United States as a species *P. virginianum* L. distinct from the European *P. vulgare*. (See especially Fernald, *Rhodora*, 24, 1922, p. 141.)

59. *Lycopodium obscurum* L.

The more frequent variety is var. *dendroideum* (Michx.) Eaton; the typical variety has been found only near Kensington, Md., and Fort Humphreys, Va., Edgar T. Wherry.

61. *Pinus strobus* L.

A fine grove including all stages from trees two feet in diameter to seedlings on the bank of the Potomac just above Broad Creek, Va., W. L. McAtee; a good stand of fine trees some 2 feet in diameter on Northwest Branch above Avenel, Robert F. Griggs.

61. *Pinus taeda* L.

Sand Point, Va., W. L. McAtee.

61. *Pinus echinata* Mill.

Next to *P. virginiana* this is the most common pine on the Piedmont Plateau; it is especially abundant near Chevy Chase, and the real estate subdivision, Pinehurst, owes its name to this species, here known as Foxtail Pine, Edgar T. Wherry.

79. *Panicum scoparium* Lam.

1919 Flora states "below the fall line"; F. L. Scribner collected it at Great Falls (Suppl. 4, p. 42).

85. *Gymnopogon ambiguus* (Michx.) B. S. P.

"East of the fall line" according to the 1919 Flora; Theo. Holm reports it at Great Falls, Va.

96. *Eleocharis engelmanni* Steud.

1919 Flora restricts it to "south of Washington"; Ward's locality, Sandy Landing (Suppl. 1, p. 87) is Dickey's Landing, a short distance below Great Falls; Steele (Suppl. 6, p. 54), gives also Howard Hill Reservoir.

110. *Carex gynandra* Schwein.

Reduced to a variety of *C. crinita* Lam. by C. F. Weatherby (Rhodora, 25, p. 18, Feb., 1923).

110. *Carex aquatilis* Wahl.

According to G. P. Van Eseltine, who prepared the account of the Carexes in the 1919 Flora, this entry in the list pertains to *C. strictior* MacKenzie.

111. *Carex davisii* Schwein. and Torr.

Theo. Holm remarks that while he may have collected this only once, as it is a perennial, he found it every time that he visited Great Falls and looked for it.

113. *Arisaema pusillum* (Peck) Nash.

This form has many distinctive features, thriving in much more acid soil than *A. triphyllum*, and blooming 2-3 weeks later. Edgar T. Wherry.

118. *Juncus marginatus* Rostk.

K. K. MacKenzie (Bull. Torrey Club, vol. 56, p. 27-28, Jan., 1929) has given the new name *Juncus coriaceus* MacKenzie to the plant universally known as *J. marginatus*.

119. *Juncus canadensis* J. Gay.

MacKenzie (op. cit. pp. 29-31) revives the name *Juncus longicaudatus* (Engelm.) MacKenzie for the plant generally known as *J. canadensis*.

119. *Juncoides campestre* (L.) Kuntze.

Theo. Holm considers the local plant to be a species, *Luzula multiflora* (Ehrh.) Lej., distinct from *J. campestre* and varieties (Rhodora, 28, pp. 133-138, 3 figs., August, 1926). He reports the form *bulbosum* as common in sandy soil near Clinton, Md.

122. *Erythronium albidum* Nutt.

1919 Flora states "above Little Falls"; H. M. Smith's station at Vis-a-vis Landing was opposite Three Sisters Id. (Suppl. 2, p. 131).

122. *Muscari racemosum* (L.) Mill.

Bayard Long says "Probably it is as frequent along the Potomac above the city of Washington as anywhere in America." (Rhodora 24, p. 17, Jan., 1922.)

125. *Narcissus biflorus* Curtis.

Near Kalorama Heights, E. S. Steele (Suppl. 6, p. 59). In the 1919 Flora the comment on this record is "probably a persistent garden bulb," although Steele distinctly states "a genuine escape, as a good many plants were found scattered about a grassy field." Regardless of this particular case, denying *Narcissus* a formal place in the catalogue of our flora seems cavalier treatment for a species that has persisted and spread without cultivation in some localities for nearly 150 years. A case in point is the site of Belvoir Mansion in the Fort Humphreys Reservation. *Narcissus* is abundant about the ruins of this celebrated colonial home which was burned in the 1780's.

129. *Habenaria flava* (L.) A. Gray.

The plant occurring here is *H. scutellata* Nuttall which by some students is given specific rank, Edgar T. Wherry.

131. *Corallorrhiza wisteriana* Conrad.

A colony remote from the Potomac occurs in a ravine near Pierce Mill, Mrs. Nellie C. Knappen, 1924.

132. *Salix pentandra* L.

Persistent and spreading from an old osiery at Laurel. Specimen collected, May 20, 1928, by W. L. McAtee, identified by C. R. Ball.

133. *Salix wardi* Bebb.

Camillo Schneider lists this as *S. longipes* var. *wardii* (Journ. Arn. Arb. 1, No. 1, July, 1919, p. 28). This change affects also the combination for the hybrid with *S. nigra*.

135. *Myrica carolinensis* Mill.

There are two colonies in dry woods in upper Rock Creek Park, Mrs. Nellie C. Knappen, 1925.

140. *Quercus macrocarpa* Michx.

The Ward (1881 Flora, p. 112) and Steele (Suppl. 6, p. 60) records for this tree do not seem adequately recognized by the statement that the species "is sometimes planted within our limits" (1919 Flora, p. 140).

141. *Ficus carica* L.

Should be given a regular place in the list; trees persist indefinitely here (e. g. one growing from beneath northeastern corner of Bureau of Entomology Building), and sometimes even bear fruit.

155. *Nymphaea*.

M. L. Fernald advocates *Nymphozanthus* as the correct generic name for the yellow pond lily. (Rhodora, 21, pp. 183-188, Oct., 1919).

155. *Brasenia schreberi* Gmel.

Is abundant in the ponds at Wasena Park from which gravel for the filter beds was taken, Robert F. Griggs.

157. *Delphinium tricornis* Michx.

Far from being "almost extinct" this species occurs by the hundreds on islands in the upper Potomac, Edgar T. Wherry.

158. *Trautvetteria carolinensis* (Walt.) Vail.

Occurs on rock ledges just below Great Falls, Va., 1921, Edgar T. Wherry.

160. *Jeffersonia diphylla* (L.) Pers.

1919 Flora restricts this to "Islands of the Potomac"; it has been found elsewhere, as at mouth of Scott's Run, Va., Theo. Holm (Suppl. 5, p. 9).

165. *Erysimum*.

The character given in key as to hairiness of *Erysimum* does not agree entirely with what is said of the plant on page 167.

166. *Radicula obtusa* (Nutt.) Greene.

"Localities not indicated"; Ward gave near Washington Monument (1881 Flora, p. 64).

167. *Thlaspi arvense* L.

1919 Flora states "not collected recently"; it has, however, since been found on a railroad embankment in Washington, May 8, 1918, by F. W. Hunnewell, at Dyke, Va., May 18, 1921, W. L. McAtee, and Theo. Holm has collected it in old fields near Clinton, Md.

179. *Crataegus uniflora* Muenchh.

1919 Flora restricts to "woods along upper Potomac." Silver Hill, G. W. Oliver, has been recorded (Holm, Suppl. 3, p. 112).

180. *Prunus cuneata* Raf.

An earlier name is *P. susquehanae* Willd. (M. L. Fernald, Rhodora, 25, p. 71, May, 1923).

188. *Vicia sativa* L.

1919 Flora states "a species so far not found here." Material collected along Fox Ferry Road, Md., May 17, 1928, by W. L. McAtee has been determined as *V. sativa* by Roland McKee.

192. *Zanthoxylum americanum* Mill.

1919 Flora ranks this only as an escape from cultivation; the plant is abundant on Mineshoe Island, however, where it can scarcely be other than native, C. R. Shoemaker.

196. *Tithymalopsis marylandica* (Greene) Small.

A hybrid between *T. ipecacuanhae* and *T. corollata* (Theo. Holm, Amer. Midl. Nat., 9, pp. 149-175, July, 1924) which should, therefore,

not have a formal entry in the list of local plants. Homer D. House remarks that this form probably is that named *Euphorbia uniflora* by Rafinesque. House applies the generic name *Agaloma* to all our *Tithymalopsis* (Amer. Midl. Nat., 7, pp. 130-131, Sept., 1921).

204. *Ascyrum stans* Michx.

1919 Flora gives it as a plant of dry sandy soil; it is at least equally characteristic of bogs.

211. *Opuntia*.

The correct name of the common prickly pear of our region is *Opuntia compressa* (Salisbury) Macbride, J. N. Rose.

212. *Rhexia mariana* L.

1919 Flora records it from northeast of Washington. Accotink, W. Hunter (Suppl. 3, p. 112) and Marshall Hall, E. S. Steele (Suppl. 6, p. 11) are in other directions.

223. *Neopieris*.

Rehder includes this under *Xolisma* (Journ. Arn. Arb. 5, No. 1, pp. 49-51, Jan., 1924).

229. *Bartonia paniculata* (Michx.) Robinson.

Occurs in moist woods, not bogs, near Dyke, Va., Edgar T. Wherry, 1918.

236. *Nyctelea ambigua* (Nutt.) Standley.

1919 Flora restricts this to "above the fall line." E. S. Burgess's station (Suppl. 3, p. 120), Poplar Point, part of what we now call Bolling Field, is in the Coastal Plain.

242. *Scutellaria serrata* Andr.

1919 Flora restricts this to "above the fall line"; Theo. Holm reports it as rare near Clinton, Md.

243. *Dracocephalum denticulatum* Ait.

Grows in wet alluvial soil, and is so different in aspect from *D. virginianum* of dry slopes, that it seems advisable to regard them as distinct, Edgar T. Wherry.

245. *Koellia mutica* (Michx.) Britton.

Restricted to the Coastal Plain in the 1919 Flora but occurs also on the Piedmont as at Spring Hill, Va., and Glenmont, Md., Edgar T. Wherry.

245. *Cunila origanoides* (L.) Britt.

Homer D. House uses the generic name *Mappia* for this plant (Amer. Midl. Nat. 8, No. 2, March, 1922, pp. 61-64).

251. *Ilysanthes*.

The key characters in the 1919 Flora are transposed. According to F. W. Pennell (Torreya, 19, p. 149, Aug., 1919) the correct name

for *I. attenuata* (Muhl.) Small is *I. inaequalis* (Walt.) Pennell. *I. dubia* in the 1919 Flora is said to occur on "wet soil along the Potomac," to which Theo. Holm adds wet places near Clinton, Md.

252. *Veronica scutellata* L.

1919 Flora restricts this to "upper Potomac." Recorded from Marshall Hall and New Alexandria, Va., F. W. Pennell (Suppl. 6, p. 14).

254. *Bignonia radicans* L.

Two "strongly marked varieties" were described but not named by Robert Ridgway (Garden and Forest, pp. 453-454, Nov., 1896). These were the orange- and red-flowered forms, respectively. A yellow-flowered form also occurs near Mount Vernon according to William Hunter.

262. *Valerianella woodsiana* (Torr. and Gray) Walp.

1919 Flora gives from High Island to Chain Bridge; E. P. Killip and Neil Hotchkiss collected it in Virginia opposite Plummers Island in May, 1925.

262. *Valerianella chenopodifolia* (Pursh.) DC.

Recorded only from above Chain Bridge; common along Fox Ferry Road, Md., May 17, 1928, W. L. McAtee.

274. *Eupatorium purpureum* L.

Later authorities seem to agree that the two forms of *Eupatorium* grouped under the name *purpureum* in the 1919 Flora should be recognized as species, but differ as to the names to be applied to them. K. M. Wiegand uses the names *E. verticillatum* Lamarck and *E. purpureum* L. (Rhodora, 22, pp. 64-68, April, 1920), and K. K. MacKenzie uses for them respectively *E. purpureum* and *E. maculatum* L. (Rhodora, 22, pp. 157-165, Oct., 1920).

277. *Solidago*.

The characters as to racemes for species 6 and 18 are transposed in the key, Edgar T. Wherry.

281. *Aster novae-angliae* L.

1919 Flora restricts it to upper Potomac. There are numerous stations elsewhere; Potomac Flats has been published (Suppl. 3, p. 115; Suppl. 6, p. 84).

283. *Antennaria solitaria* Rydb.

Grows under *Kalmia* bushes near Bullneck Run, Va., Edgar T. Wherry, 1925.

284. *Gnaphalium uliginosum* L.

Flora states "not collected since 1884"; Holm in 1901 records it from Hyattsville and Marshall Hall (Suppl. 5, p. 13).

287. *Helianthus*.

In line 16 for "copiously" read more or less, Edgar T. Wherry.

287. *Helianthus angustifolius* L.

1919 Flora states "northeast of Washington"; the plant occurs in most bogs, however; Holm reported it from near Fort Myer (Suppl. 5, p. 13), and W. L. McAtee has collected it in the bog adjoining cemetery in Alexandria, localities not "northeast."

288. *Coreopsis tinctoria* L.

1919 Flora states "reported by Ward as escaped in a few places but has not been collected recently." It was also reported, however, by Steele 20 years later (Suppl. 5, p. 85), and collected by McAtee, July, 1904, so would seem to deserve a formal place in the list.

289. *Bidens bidentoides* (Nutt.) Britt.

This entry of the 1919 Flora and of Supplement 5 (p. 13) is *B. con-nata* var. *anomala* Farwell. (S. F. Blake, *Rhodora*, 27, pp. 34-35, Feb., 1925.)

291. *Senecio obovatus* Muhl.

The presence of this plant at Great Falls, Va., is confirmed by Edgar T. Wherry; there is a well developed colony on rocks right at the falls (1924).

V.

Records of certain transplanting operations.

Confusion already has arisen because of the collecting of transplanted specimens by persons not knowing their origin, and it is considered desirable to place on record all that can be learned about such operations. Information additional to that here given will be appreciated.

The most extensive transplantations into an apparently natural environment, of which we are aware, are those made on the property of the Washington Biologists' Field Club, Seven Locks, Md. The Club owns Plummer's Island, and the adjacent mainland overlapping the island at both ends. Few plants have been introduced to Plummer's Island itself, except in a small wild flower garden, those known to the writer being:

Polypodium polypodioides
Tsuga canadensis
Ilex opaca

Epigaea repens
Gaultheria procumbens
Rhododendron maximum

On the Maryland shore nearby the following things have been transplanted, and most of them are now growing. Information on this point is largely from Dr. A. K. Fisher, who has had most to do with the work.

| | |
|--------------------------------|--|
| <i>Lygodium palmatum</i> | <i>Aronia melanocarpa</i> |
| <i>Pellaea atropurpurea</i> | <i>Prunus virginiana</i> |
| <i>Pinus taeda</i> | <i>Ilex opaca</i> |
| <i>Pinus pungens</i> | <i>Ceanothus americanus</i> ; this formerly grew here naturally |
| <i>Tsuga canadensis</i> | <i>Vitis labrusca</i> |
| <i>Taxodium distichum</i> | <i>Viola pedata</i> |
| <i>Veratrum viride</i> | <i>Aralia spinosa</i> |
| <i>Iris cristata</i> | <i>Cornus alternifolia</i> |
| <i>Iris verna</i> | <i>Clethra alnifolia</i> |
| <i>Cypripedium acaule</i> | <i>Epigaea repens</i> |
| <i>Comptonia peregrina</i> | <i>Gaultheria procumbens</i> |
| <i>Hicoria ovata</i> | <i>Rhododendron maximum</i> |
| <i>Betula lenta</i> | <i>Dodecatheon meadia</i> |
| <i>Quercus macrocarpa</i> | <i>Mentha spicata</i> |
| <i>Caltha palustris</i> | <i>Catalpa bignonioides</i> |
| <i>Magnolia virginiana</i> | <i>Lonicera sempervirens</i> |
| <i>Liquidambar styraciflua</i> | <i>Viburnum nudum</i> |
| <i>Aruncus sylvestris</i> | |

The following species have been planted in the largest of the Powder-mill Bogs (No. 1).

| | |
|---------------------------|------------------------------|
| <i>Schizea pusilla</i> | <i>Sarracenia purpurea</i> |
| <i>Abama americana</i> | <i>Sarracenia flava</i> |
| <i>Drosera filiformis</i> | <i>Sarracenia drummondii</i> |

In this connection it may be mentioned that William Hunter for years transplanted chiefly woody plants to the National Zoological Park, where it is not safe therefore to assume that all of the trees, shrubs, and climbers are indigenous.